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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,617	07/17/2003	Wouter Ijdo	080395.52547C1	9661

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EXAMINER

MARCHESCHI, MICHAEL A

ART UNIT PAPER NUMBER

1755

DATE MAILED: 06/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/620,617

Applicant(s)

IJDO ET AL.

Examiner

Michael A. Marcheschi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 14-17 and 23-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-17 and 23-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

New claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

New claim 24 is indefinite because it recites that no organic liquid is used, however, the additives defined in claim 14 are organic liquids (the specification defines that additive is a solution (i.e. liquid) and the claim does not define otherwise), thus the examiner is unclear as to how claim 24 is a limitation of claim 14.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

New claim 24 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The new matter present is the limitation defined in new claim 24 because the examiner cannot find clear support in the original specification and applicants provide no guidance.

Claims 14-16 and 23-26 are rejected under 35 U.S.C. 103(a) as obvious over Coutelle et al. (638) in view of McCullough.

Coutelle et al. teach in the entire document (specifically the examples and the claims), a method for making a clay slurry comprising forming a mixture of synthetic hectorite clay, an organic phosphorous material (phosphonate) and water and dispersing the mixture with a PENDRAULIK dissolver. In addition, column 2, lines 58-63 states that the low to medium shearing forces are used to disperse the clay material.

McCullough teaches in the abstract that either natural or synthetic clays are known thickeners.

The primary reference teaches all of the claimed steps, except this reference use a synthetic clay (hectorite). It is the examiners position, however, that the use of a hectorite from a natural origin would have been obvious motivated by the fact that the secondary reference teaches that either synthetic or natural clays are known thickeners. Since the primary reference is directed to clay thickeners and the secondary reference teaches that natural clay materials are thickeners, as an equivalent to synthetics clay, one skilled in the art would have appreciated the substitution defined above. In addition, the primary reference bases the thickeners for use in polishing (abrasive) pastes (see the description in column 3, line 66-column 4, line 7) which is the same use as the thickener according to the secondary reference. With respect to the shear mixture, a PENDRAULIK dissolver is a shear mixture. In addition, the reference clearly defines that shearing forces are used (i.e. shearing step). In the above rejection, to support the examiners remarks that a PENDRAULIK dissolver is a shear mixture, reference is directed to Hess et al.,

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column 10, lines 29-31 and column 17, lines 52-53 which clearly supports that a PENDRAULIK dissolver is a shear mixture. This reference is being used as evidence reference.

With respect to claim 16, the reference teaches in claim 13 that the additive can be an alkali salt of the organic phosphorous (diphosphonic acid) material and although a tetra sodium salt is not defined, it is the examiners position that the selection of this species from the generic alkali salt is clearly within the scope of the skilled artisan, as evidenced by the following case law. A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971). With respect to the 1-hydroxyethylene-1,1-disphosphonic acid, the reference teaches formulas for the diphosphonic acid (i.e. R values defined) and it is the examiners position that this teaching encompasses the claimed materials absent evidence to the contrary. In addition, this teaching when coupled with the teaching of sodium salt of hydroxyethane-1,1-diphosphonic acid would suggest to the skilled artisan the claimed specific additive.

With respect to new claim 24, no organic liquid is used.

With respect to new claims 25 and 26, example 5 shows that the hectorite and additive are first mixed prior to dispersing in water. Column 3, line 57 implies that the additive is a powder. Assuming arguendo about the steps, no distinction is seen to exist because reversing the order of steps in a process does not impart patentability when no unexpected result is obtained. *Ex parte Rubin* (POBA 1959) 128 U.S.P.Q. 440, *Cohn v. Comr. Pats.* (DCDC 1966) 251 F Supp 378, 148 U.S.P.Q. 486.

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Claim 17 is rejected under 35 U.S.C. 103(a) as obvious over Coutelle et al. (638) in view of McCullough, as applied to claim 14 above and further in view of Guzi, Jr. et al.

Guzi, Jr. et al. teach in column 5, lines 24-39 that a Gaulin homogenizer is a conventional apparatus for homogenizing a mixture.

As an alternative to the above teaching, the primary reference teaches in column 5, lines 6-8, a method for making a clay slurry comprising homogenizing a mixture of hectorite clay, an organic phosphorous material (phosphonate) and water.

Although the primary reference does not literally define the specific homogenizer (i.e. shearing apparatus), one skilled in the art would have appreciated and found obvious the claimed apparatus because this is a well known apparatus to homogenize a mixture, as evidenced by Guzi, Jr. et al. Although this reference is not directed to the clay slurries, this reference is being applied only to show that the claimed apparatus is known to homogenize a mixture, irrespective of what the mixture is. Assuming arguendo about the sequence of the claimed method, the change in sequence of adding ingredients would have been obvious to one of ordinary skill in the art absent evidence to the contrary. In re Gibson 5 USPQ 230.

Claims 14-15 and 24-25 are rejected under 35 U.S.C. 103(a) as obvious over Hoover et al. (859) in view of Coutelle et al. (911).

Hoover teaches in the abstract, column 2, lines 3-19, column 3, lines 28-35, column 3, line 61-column 4, line 5 and column 65, lines 17-23, a method for preparing a pigment slurry comprising dispersing a pigment in water with a phosphonates dispersing additive and shearing the mixture.

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Coutelle et al. teaches in claim 7 that natural hectorites are well known pigment (clays) for use in paper coating.

Although column 3, line 61-column 4, line 5 of Hoover et al. defines this method with the use of kaolin clay, the statements made in column 3, lines 34-35 and column 6, lines 20-23 imply that the method can be applied to other well known pigments and clays used in the paper coating field. This teaching or suggestion defines the necessary motivation to use any well known pigment (clay) used in the paper coating field. Since natural hectorite is a well known pigment (clay) for paper coating, as shown by the secondary reference, its use as the pigment (clay) according to the primary reference is obvious motivated by the above statements made in the primary reference.

With respect to new claim 24, no organic liquid is used (the additive is a solid-see column 3, line 44 of the primary reference).

With respect to new claim 25, column 3, lines 45-48 of the primary reference defines that the solids (pigment (clay)) are dry mixed with the phosphonates additive prior to dispersing in water.

Claim 17 is rejected under 35 U.S.C. 103(a) as obvious over Hoover et al. (859) in view of Coutelle et al. (911), as applied to claim 14 above and further in view of Guzi, Jr. et al.

Although the primary reference does not literally define the specific homogenizer (i.e. shearing apparatus), one skilled in the art would have appreciated and found obvious the claimed apparatus because this is a well known apparatus to homogenize a mixture, as evidenced by Guzi, Jr. et al. Although this reference is not directed to the clay slurries, this reference is being

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applied only to show that the claimed apparatus is known to homogenize a mixture, irrespective of what the mixture is. Assuming arguendo about the sequence of the claimed method, the change in sequence of adding ingredients would have been obvious to one of ordinary skill in the art absent evidence to the contrary. In re Gibson 5 USPQ 230.

Applicant's arguments with respect to all the claim have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

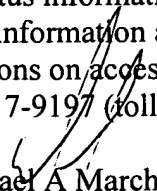
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MM  
6/06

  
Michael A Marcheschi  
Primary Examiner  
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